



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,882

02/02/2005

Alfred Mueller

004501-797

5246

21839

7590

03/03/2009

BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

GATES, ERIC ANDREW

ART UNIT

PAPER NUMBER

3726

NOTIFICATION DATE

DELIVERY MODE

03/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed 2 December 2008.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 7-11, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Morawski et al. (US 4,540,187). Morawski et al. '187 shows in Figures 1-4 a method of clamping a rotationally symmetrical body (W) with its first side (tapered side as viewed in Fig. 1) pulled by means of a tensile force (22,36,38) which acts in extension of the rotation axis of the body on the first side of the body against a supporting element (62) having a centering effect, wherein the supporting element is acted upon with a spring force (86, see column 2, lines 43-45) which is opposed to the tensile force, wherein the spring force is slightly smaller than the tensile force (must be in order for chuck to operate) and is proportioned in such a way that when the body strikes the supporting element, the supporting element first of all yields in the axial direction. Morawski et al. '187 shows clamping the body while the tensile force pulls the body (axial movement of drawbar connected through threaded socket (30) of puller

Art Unit: 3726

shaft (22) provides tensile force which pulls body during clamping action), wherein the body is centered by a centering device (60) which is arranged radially outward of said supporting element (acting surface 98 of centering device 60 is radially outward of acting surface 100 of supporting element 62). Morawski et al. '187 shows the tensile force being transmitted to the body by means of a tie rod (22) which is connected to the body by means of a quick-action coupling (via collet 38). Morawski et al. '187 shows the tie rod guided with radial clearance axially and concentrically (must be in order for chuck to operate) to the rotation axis of the rotationally symmetrical body. Morawski et al. '187 shows the body with a centering region (tapered portion as seen in figure 1), which is arranged at an axial distance from the first side of the body and is oriented in the same direction as the first side of the body, is pulled against the centering device (60).

Morawski et al. '187 shows the spring force, tensile force and configuration of supporting element are selected in accordance with the body to be clamped. Morawski et al. '187 shows the supporting element provided with supporting surfaces (100) which are arranged concentrically to the rotation axis of the body to be clamped and which are inclined toward the rotation axis or are contiguous along a defined circumference and form an annular supporting ring. Morawski et al. '187 shows the centering device (60) is provided at a an axial distance form the supporting element, wherein the centering device is provided with centering surfaces (98) which are arranged concentrically to the rotation axis of the body to be clamped and are inclined toward the rotation axis.

Morawski et al. '187 shows the centering surfaces (98) are distributed uniformly over the circumference and are contiguous along a defined circumference and form an annular

Art Unit: 3726

centering surface (as seen in figures 1 and 2). Morawski et al. '187 shows wherein the centering device (60) is disk-shaped (as seen in figure 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morawski et al. (US 4,540,187) in view of Clavell (US 3,019,039) and Kempton et al. (U.S. Patent 1,692,379).

6. Regarding claim 6, Morawski et al. '187 lacks the body being a rotor with integrally formed moving blades, or wherein the centering device is selected which has centering surfaces engaging between the moving blades in a finger-like manner. Clavell '039 shows in Figures 1 and 2 a rotor (1) with integrally formed moving blades (2) that is clamped concentrically on a rotatable shaft 4 for the purpose of maintaining the concentricity during rotation. Kempton et al. '379 shows centering devices 41 on a workholder 10 that are used for the purpose of engaging between the roots of gear teeth in a finger-like manner so as to maintain the gear in its relative rotational position on the workholder. Therefore it would have been obvious to one of ordinary skill in the art to have replaced the clamped work piece and centering device of Morawski et al. '187 with a rotor having integrally formed blades as taught by Clavell '039 and the

Art Unit: 3726

centering devices as taught by Kempton et al. '379 in order to increase the versatility of the clamping device through the ability to clamp work pieces with a plurality of blade-like structures.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morawski et al. (US 4,540,187) in view of Clavell (US 3,019,039).

8. Regarding claims 12 and 13, Morawski et al. '187 lacks the body being a rotor having a hub on a first side including moving blades integrally formed on the hub, wherein the hub projects beyond the moving blades. Clavell '039 shows in Figures 1 and 2 a rotor (1) having a hub (3) on a first side including moving blades (2) integrally formed on hub, wherein the hub projects beyond the moving blades. Therefore it would have been obvious to one of ordinary skill in the art to replace the clamped work piece of Morawski et al. '187 with a rotor having a hub with integrally formed blades as taught by Clavell '039 in order to increase the versatility of the clamping device through the ability to accommodate clamping work pieces with a plurality of blade-like structures.

Allowable Subject Matter

9. Claims 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Art Unit: 3726

10. Applicant's arguments filed 2 December 2008 have been fully considered but they are not persuasive.

11. Applicant argues that the puller shaft 22 of Morawski does not constitute an element which pulls a body by a tensile force as set forth in claim 1. However, it is evident that the puller shaft does in fact work by applying a tensile force to screw 36, said force being transmitted to the body through fingers 44. The language of the claim does not require that the tensile force act directly on the body, only that a tensile force be used in pulling the body. It is the same for claim 7, in which the body is pulled by the tie-rod through contact with the fingers.

12. For the reasons as set forth above, the rejections are maintained.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3726

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC A. GATES whose telephone number is (571)272-5498. The examiner can normally be reached on Mon-Thurs 8:45 - 6:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A. G./
Examiner, Art Unit 3726
25 February 2009

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726